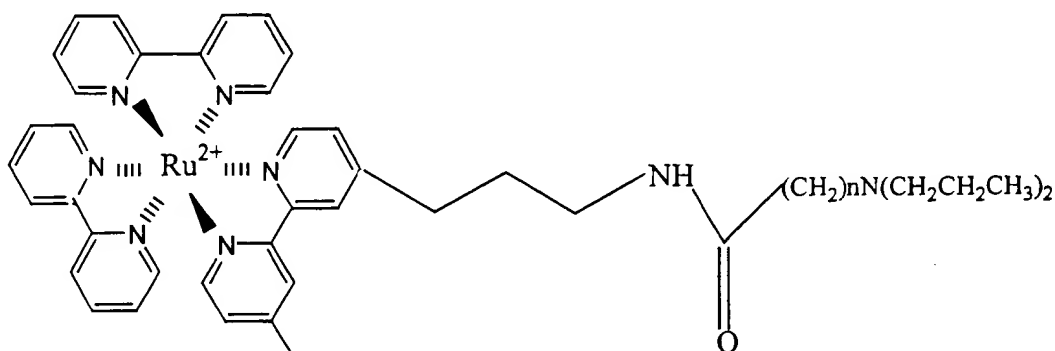


4. (Amended) A compound which comprises an electrochemiluminescent label including a coordinate complex of a metal, which label is linked to an electrochemiluminescence coreactant, wherein said coreactant undergoes oxidation to form a reductant or reduction to form an oxidant, such that said compound emits electrochemiluminescence when exposed to electrochemical energy.

9. The compound of claim 3 having the formula:

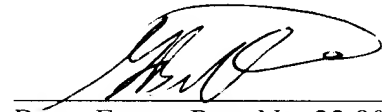


10. The compound of claim 3, further comprising a biomolecule.
11. The compound of claim 3, wherein the coreactant is not an analyte of interest.
12. The compound of claim 3, said electrochemiluminescent label is linked to said coreactant by a linkage which comprise one or more linking groups for attachment of biomolecules.
13. The compound of claim 3 or 4, wherein said coreactant is an amine.
14. The compound of claim 3 or 4, wherein said coreactant is a tertiary amine.
15. The compound of claim 3 or 4, wherein said coreactant comprises a dipropyl amine moiety.
16. The compound of claim 3 or 4, wherein said coreactant is an N,N-dipropyl amino acid.

17. The compound of claim 3 or 4, wherein said coreactant is NADH.
18. The compound of claim 3 or 4, wherein said coreactant is the hydrolyzed form of a β -lactam antibiotic having a hydrolyzed β -lactam bond.
19. The compound of claim 3 or 4, wherein said electrochemiluminescent label comprises ruthenium, osmium or rhenium.
20. The compound of claim 3 or 4, wherein said electrochemiluminescent label and said coreactant are linked by an amide bond.
21. Please delete. ✓
22. The compound of claim 3 or 4, wherein said coreactant is a species capable of interacting with said electrochemiluminescent label to produce electrochemiluminescence or wherein said coreactant is a precursor species which upon exposure to electrochemical energy is transformed into is a species capable of interacting with said electrochemiluminescent label to produce electrochemiluminescence.
-
26. (New) The compound of claim 4, wherein said label comprises a single metal ion.
27. (New) The compound of claim 3 or 4, wherein said ECL label and said coreactant are directly linked via a functional group of said ECL label or said coreactant.
28. (New) The compound of claim 3 or 4, wherein said ECL label and said coreactant are linked via linker comprising a polymer, a polypeptide chain, a polynucleic acid, a polysaccharide, an oligo-ethylene glycol group, or a combination thereof.
29. (New) The compound of claim 3, wherein said ECL label and said coreactant are directly linked via a linkage comprising one or more linking groups selected from the group consisting of NHS-esters, carboxylic acids, amines, thiols, disulfides, maleimides, hydroxides and combinations thereof.

30. (New) The compound of claim 3, wherein said compound is linked to a biomolecule.
31. (New) The compound of claim 3, wherein said compound consists essentially of said ECL label and said coreactant.
32. (New) The compound of claim 3, wherein said ECL label is oxidized by exposure to electrochemical energy and said coreactant is a reductant or a reductant precursor.
33. (New) The compound of claim 3, wherein said ECL label is reduced by exposure to electrochemical energy and said coreactant is an oxidant or oxidant precursor.
34. (New) The compound of claim 3, wherein said ECL label is different from said ECL coreactant.

By:



Barry Evans, Reg. No. 22,802
Gerard Bilotto, Reg. No. 51,474
Kramer Levin Naftalis & Frankel LLP
919 Third Avenue
New York, NY 10022
Phone: (212) 715-9100
Fax: (212) 715-8000